

ABSTRACT

Methods for reducing feature sizes of devices such as electromagnetic sensors are disclosed. A track width of a MR sensor is defined by a mask having an upper layer with a reduced width and a lower layer with a further reduced width. Instead of or in addition to being supported by the lower layer in the area defining the sensor, the upper layer is supported by the lower layer in areas that do not define the sensor width. In some embodiments the upper layer forms a bridge mask, supported at its ends by the lower layer, and the lower layer is completely removed over an area that will become a sensor. Also disclosed is a mask having more than two layers, with a bottom layer completely removed over the sensor area, and a middle layer undercut relative to a top layer.